Arise
AFRICA ROUTINE IMMUNIZATION SYSTEM ESSENTIALS

NOTES FROM THE FIELD

Bringing Immunization Closer to Communities:

Community-Centered Health Workers

In Africa, the need for sufficient numbers of health personnel capable of performing an increasing range of duties is a constant challenge. For immunization programs, the demands on health workers continue to mount. While coverage rates for routine immunization (RI) in the Africa region have risen over the past decade and the WHO/UNICEF estimate of DTP3[1] coverage is 74% for 2011,[2] higher levels are needed to reduce transmission of disease, achieve herd immunity, and close the equity gap. The Global Vaccine Action Plan (GVAP), endorsed by the World Health Assembly in 2012, calls for all countries to achieve DTP3 coverage of at least 90% at the national level and 80% in every district.

> **"I am here. I live with the people. I make an effort to know all the families. At the moment, there is not one woman in my village who has a child of vaccination age that I do not know. I know what is to be done for each case."**
>
> ***– Community nurse in Cameroon***

The introduction of new, lifesaving—but costly—vaccines against diarrheal disease, pneumonia, and other illnesses adds complexity to vaccine handling practices by health personnel. With the doubling of the developing world's population since 1985, the sheer number of people to vaccinate has increased vastly, and the service delivery strategies to reach them have become more diverse. To achieve and maintain the GVAP targets and realize the benefits of new vaccines, health workers must focus on the needs of each community and every child.

In 2009, the Bill & Melinda Gates Foundation created the ARISE project, managed by JSI, to assemble the evidence on what drives improvements in RI performance in Africa. To amass such evidence, ARISE conducted in-depth, mixed methods comparative case studies in Cameroon, Ethiopia, and Ghana. It employed an assets-based approach to identify common drivers of improvements in RI performance at the district level, describe the pathways by which they improve coverage, and identify contextual factors affecting performance. A report that synthesizes findings across the 12 study districts in three countries and describes the six common drivers of improvements in RI coverage is available on the ARISE website.[3]

One driver of improved performance identified in the study was the existence of ***community-centered health workers***. In the ARISE case studies, respondents reported that health workers who actively and directly focused on community needs (referred to here as "community-centered health workers") were instrumental in improving coverage. In districts where coverage remained unchanged, community-centered health workers were either absent or less effective in working with communities. The success of this driver related not only to the presence of the workforce in the community and their ability to bring services into the community, but also to the way in which the health workers functioned at the

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1 As estimated by a third dose of diphtheria-pertussis-tetanus containing vaccine (DTP3)
2 http://apps.who.int/immunization_monitoring/en/globalsummary/GS_AFRProfile.pdf?CFID=4700814&CFTOKEN=10922440, accessed August 31, 2012.
3 http://arise.jsi.com/files/2012/08/Arise_3CountryBrief_final508_8.27.12.pdf

community level. Community-centered health workers contributed to coverage improvement by providing services and information directly, building effective community partnerships, and ensuring continuity in the relationship between health workers and clients. The community-centered health workers, in turn, received ongoing support from their respective district health management teams in the form of a regular supply of vaccines and related commodities and technical support, including supervision, data-based performance review, and opportunities to share experiences.

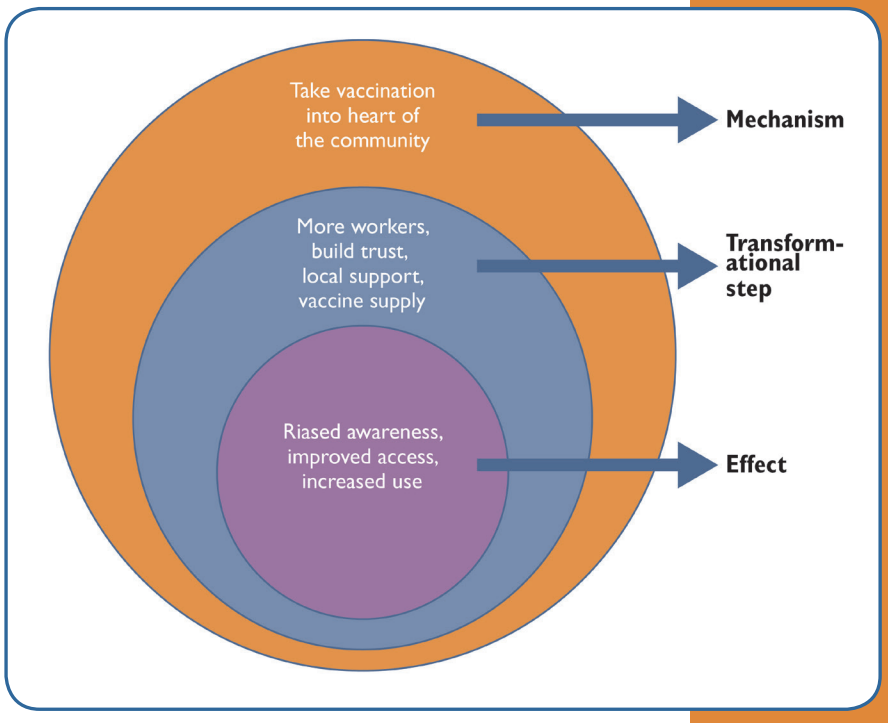
Who are community-centered health workers?

While the attributes of community-centered health workers varied across the ARISE case study countries, these workers shared some common features. In all three countries, they were a salaried Ministry of Health cadre of trained health workers who delivered vaccinations and other primary health care services, usually in settings other than hospitals or health centers (i.e., at health posts, outreach sites, and sometimes home visits). These workers lived in the community, were stationed at a health post in the community, or traveled to outreach locations, such as islands or remote rural or forest areas.

In Ethiopia, they were health extension workers (HEWs), recruited and trained as part of the government's Health Extension Program to expand primary health care. In Ghana, they were community health nurses (CHNs), a long-standing cadre of health workers. In Cameroon, community-centered health workers were nurses and vaccinators assigned to attend to community health care.

As indicated in Figure 1, community-centered health workers brought immunization closer to communities. Often, they worked with communities to plan the time and place for vaccination services and then provided those services. Many of them educated and informed the community about immunization (either directly or through local leaders), encouraged attendance at immunization sessions, registered eligible children, and located dropouts and urged them to complete the vaccination schedule. The effect of their work was to raise awareness of the benefits of, and demand for, immunization while also improving the cultural, social, and physical dimensions of access to services. As a result, regular attendance at immunization sessions and completion of the vaccination schedule improved.

Figure 1. Cadre of Community-centered Health Workers
Pathway to Routine Immunization Improvement



Key to the success of this driver were the relationships, based on mutually motivating trust and respect that developed over time, between these health workers and community members, local government officials, and volunteers. Name recognition was high: health workers and community members knew each other personally. This basis of trust, together with the technical support and essential commodities (reliable supply of vaccines, syringes, needles, etc.) provided by district health teams and health facility staff, enabled community-centered health workers to tailor services to community members' needs and engage them in running the services.

Ways in which community-centered health workers strengthened RI

Ghana: Motivating CHNs through local autonomy

Almost 20 years ago, Ghana's Ministry of Health created a cadre of health workers called community health nurses (CHNs); they are responsible for the delivery of services in the community. While some CHNs are facility based, others are placed within the community to deliver "close-to-client" services. CHNs, often with the help of community-based volunteers, deliver a package of public health services, including antenatal and postnatal care, family planning services, health education, and immunization.

District health teams provide technical and financial support to CHNs. In two ARISE study districts, CHNs said they experienced autonomy and accountability due, in part, to financial responsibilities that included using imprest accounts to buy fuel, pay for public transportation, and arrange for minor vehicle maintenance. The director of one district's health team assigned a team of "community directors of health services," headed by a CHN, to be responsible for all clinics, home visits, and other health activities in the communities they served. Community members described how the new structure brought immunization services closer to them and were tailored to their needs. For their part, CHNs reported that this approach led to increased accountability, job satisfaction, and motivation.

"The District Director of Health Services has developed a team approach in which health staff take two to three communities, so the community gets to know the health worker and the health worker gets to know community members. CHNs are responsible for everything in their communities. We were told, 'You are going to monitor your own communities,' and this included working with the traditional birth attendants, the chief, and all the other people active in health."

–Community health nurse, Ghana

Ethiopia: Using female Health Extension Workers (HEWs) as agents of change

A key component of Ethiopia's Health Extension Program is the creation of a cadre of HEWs. These are trained and paid, locally recruited female workers supported by community-based volunteers and development committees to implement a package of 16 health services, including immunization.

HEWs conduct house-to-house visits to create awareness about the benefits of vaccination, encourage community members to attend vaccination clinics and outreach sessions, and deliver services. In a typical week, they walk for several hours each day to visit families in the villages while also providing services at the health post. HEWs, community-based volunteers, and development committees work together to register children for vaccination and identify dropouts, supporting parents to complete the vaccination schedule. HEWs collaborate closely with local government leaders to monitor jointly program performance and address the challenges facing immunization.

HEWs were reported to be effective because of their work ethic, commitment, and gender. As one health worker said, "Women tell the HEWs their personal problems. It helps with encouraging immunization and family planning. The HEW as a woman has a better outcome in terms of sensitization."

In districts where coverage improved, the HEWs lived in the community rather than commuting from nearby towns to the communities they served. They were recruited by the local administration and had ties in the district.

"When the HEWs arrived, they came with their job description about immunization and other activities, and everything changed straight away. Immunization became their responsibility."

–Alage woreda community member

Cameroon: Increasing utilization of RI services by making them attractive to the community

While nurses and vaccinators in Cameroon do not always reside in the communities they serve, they augment regular clinic-based vaccination services with outreach services and active follow-up beyond the health facility. In two ARISE study districts, health workers were assigned to specific zones for outreach to which they returned repeatedly, coming to know community members by name and building strong ties that increased the demand for immunization. Within clinics, nurses created a friendly atmosphere, using songs and personalizing the communication with mothers and their children. Health workers reported following up with pregnant women to ensure that their children, once born, would be registered for immunization. By locating dropouts, communicating with mothers, and maintaining clean, attractive health facilities, health workers improved client loyalty and adherence to the vaccination schedule, thereby reducing dropout rates.

One outcome of improved facility-based RI services was to reduce the dependence on outreach services. As one health worker noted, many mothers have accepted the idea of routinely visiting the health facility and have enjoyed the socialization outside the home. Where outreach was needed, for example to reach migrant or nomadic populations, strategies were based on a sound understanding of local dynamics, particularly the routine movement of the population. Effective outreach strategies were also bolstered by health worker behavior.

"Women are too occupied with domestic work, by farm work or by the many activities that bring revenue. Often, they forget their appointments [for immunization]. The staff, who know these women, therefore visit their homes when they realize that an appointment has been missed."

– Health worker in Cameroon

Essential factors to ensure effectiveness of community-centered health workers

The ARISE studies indicated that the mere existence of a cadre of community-centered health workers was not sufficient to drive improvements in RI performance. Certain conditions and characteristics distinguished community-centered health workers in well-performing districts from those in districts where coverage did not improve, including:

- National-level investment strategies for human resources resulted in greater numbers of community-centered health workers and increased the extent to which they were deployed to live in, or reach out to, communities. In Cameroon, Ethiopia, and Ghana, human resources at the community level increased during the period of the study.
- Health workers had a clearly-defined population to serve and frequently returned to these communities to ensure continuity of care and build strong bonds with them.
- Community-centered health workers received district- or facility-level support, including commodities (vaccines, needles, syringes, safety boxes, etc.) and technical support and feedback. The latter took the form of regular review of performance, clear accountability for reaching targets, and help with problem solving.

- In some cases, the district provided these health workers with logistical support, particularly funds for transportation, while in other cases the community provided them with transportation directly. This enabled the health workers to travel from their posts to collect vaccines and visit remote and difficult-to-reach locations with a minimum of personal sacrifice.
- A strong relationship existed between the district health team and the local civil government, with the community-centered health workers acting as a bridge between the two in some places.
- Community-centered health workers also partnered with communities by engaging with a network of community stakeholders, such as village leaders, religious leaders, volunteers, and associations. There was a sense of collaboration and teamwork between the health system and community structures.
- District health teams and supervisors employed strategies to motivate and encourage community-centered health workers. These included peer-learning techniques to share lessons learned and success stories; regular performance reviews; and giving public recognition for commitment to improving health and increasing community-level knowledge and acceptance of immunization.

Above and beyond these circumstances, ARISE study findings suggest that maintaining this cadre requires ensuring that they remain motivated. While these personnel were paid health workers who drew a salary, they exhibited an intrinsic motivation rooted in a sense of responsibility to do "important" work for the community. However, given the particular challenges they face—walking long distances, working away from home—they expressed interest in non-monetary incentives, such as being invited to trainings and meetings at the district level; appreciation parties; priority treatment for themselves, family, and health facilities; and recognition/awards given by the Ministry of Health.

Implications for Action

1. Countries that have, or are considering creating, special cadres of salaried, community-centered health workers should identify tasks that these workers can be enlisted to carry out for RI, drawing on ARISE findings as appropriate.
2. Countries that lack this type of workforce can strengthen ties with communities by re-examining the roles of peripheral health workers; for example, assigning health workers to look after the health needs of particular communities and develop strong, long-term, name-based relationships between these health workers and the communities they serve.
3. If health systems engage community-centered health workers to conduct RI activities, they should provide these workers with training, regular supervision, mentoring, and feedback, as well as vaccination supplies that are easy to obtain.
4. To reduce turnover and help ensure that community-centered health workers are able to function effectively, health systems and the development partners who support them should anticipate the full costs associated with this workforce; for example, transportation costs for visiting remote locales and for picking up and returning vaccine supplies; support for local housing; and supervision costs. They also should define specific steps to engage and motivate health workers that go beyond financial incentives.

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Further reading (available at http://arise.jsi.com/)

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